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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,691	08/28/2001	Jan Michielsens	Q65842	4452

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EXAMINER
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SALL, EL HADJI MALICK

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/939,691	MICHELSENS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	El Hadji M Sall	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 4-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/05/04</u> . | 6) <input type="checkbox"/> Other: _____  |

1. **DETAILED ACTION**

This action is responsive to the application filed on August 27, 2001. Claims 1-11 are pending. Claims 1-11 represent system for automatically recognizing devices connected in a distributed processing environment.

2. ***Claim Objections***

***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

**Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive; preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they

should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication, which adequately describes the subject matter.

- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application, which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Background, summary or description of the invention is not specified in the specification. Appropriate correction is required.

Claims 4-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim *should refer to other claims in the alternative only--*, *and/or, --cannot depend from any other multiple dependent claim*. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

**3. *Claim Rejections - 35 USC § 112***

Claim 2 is rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure, which goes to make up the device, must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited. Claim 2 is composed of two sentences. Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-9 are improper 112, 6<sup>th</sup>. The term "means" does not link to a specific function.

**4. Claim Rejections - 35 USC § 102**

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 6-7 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Ofek U.S. 6,259,695.

Ofek teaches the invention as claimed including packet telephony scheduling with common reference.

As to claim 1, Ofek teaches a communications network including an originating Real Time Data over IP host and a terminating Real Time Data over IP host between which communication is to be effected, the network also including communication control means for at least receiving information relating to the communication, characterized in that the network also includes communication forwarding means which receives at least some data sent between the two Real Time Data over IP hosts and sends to the communication control means information relating to the communication (column 3, lines 21-25, Ofek discloses method is disclosed providing virtual pipes that

carry streams of real-time traffic to/from Voice over Internet Protocol (VoIP) gateways over packet switching networks with timely forwarding and delivery; column 6, lines 48-51, Ofek discloses routing controller maps each of the data packets that arrives at each one of the input ports of the respective switch to a respective one or more of the output ports of the respective switch).

As to claim 2, Ofek teaches a network according to claim 1 wherein at least part of the network between the communication forwarding means and one of the Real Time Data over IP hosts is a Real Time Data over network. There is a second communication forwarding means, wherein the first communication forwarding means is associated with anyone of the originating Real Time Data over IP host and the terminating Real Time Data over IP host and the second communication forwarding means is associated with the other (column 15, lines 55-58, Ofek discloses Each of the transmit buffers is designated to store data packets that will be forwarded in each of the respective time frames in every time cycle, as shown in FIG. 4; figure 9; column 27, lines 38-45, Ofek discloses virtual pipe communications system for communicating packetized data over a virtual pipe comprised of a plurality of switches connected by communications links in a path, wherein a first switch within the virtual pipe is connected to receive the output of a first voice over Internet Protocol (IP) gateway and wherein a final switch within the virtual pipe is connected to provide an output coupled to transmit to a second voice over IP gateway).

As to claim 3, Ofek teaches a network according to claim 2 including a plurality of communication forwarding means, wherein each of the Real Time Data over IP hosts is connected to a selected one or respective ones of the communication forwarding means (abstract, Ofek discloses a method for interfacing a packet-switched network with real-time streams from various sources, such as circuit-switched telephony network sources...in particular, to timely forwarding and delivery of data packet between voice over IP (VoIP) gateways...; column 18, lines 61-65, Ofek discloses The data packet thus can contain a fragment of a plurality of simultaneously occurring

telephone communications or other types of real-time streams The data packet may then be routed via a synchronous virtual pipe to its destination.).

As to claim 6, Ofek teaches a network according to claim 1, wherein the or each communication forwarding means also includes tracking means for measuring values of one or more predefined parameters related to the communication and the communication forwarding means also includes transmitting means for transmitting these values to a selected data receiver (column 5, lines 29-31, Ofek discloses a system and method for transmitting and forwarding packets over a packet switching network; column 5, lines 62-65, Ofek discloses The time interval in which a switch forwards a specific packet is determined by the packet's pipe-ID, the time it reaches the switch, and the current value of the common time reference)

As to claim 7, Ofek teaches a network according to claim 1, in which one or both of the Real Time Data over IP hosts includes message means for transmitting a message to the communication control means in order to indicate that a communication session is in progress (figure 10; column 5, lines 29-31, Ofek discloses a system and method for transmitting and forwarding packets over a packet switching network; column 6, lines 48-51, Ofek discloses routing controller maps each of the data packets that arrives at each one of the input ports of the respective switch to a respective one or more of the output ports of the respective switch).

As to claim 11, Ofek teaches a method of controlling communication on a communications network, wherein the network includes an origination Real Time Data over IP host and a terminating Real Time Data over IP host between which communication is to be effected, the network also including communication control means for receiving information relating to the communication, characterized in that the method includes the steps of:

(i) transmitting at least some data from the originating Real Time Data over IP host to a communication forwarding means (column 1, lines 16-18, Ofek discloses a

method and apparatus for transmitting of data on a communication network; column 5, lines 29-31, Ofek discloses a system and method for transmitting and forwarding packets over a packet switching network);

(ii) using the communication forwarding means to direct communication between the Real Time Data over IP hosts (abstract, Ofek discloses a system and method for transmitting and forwarding packets over a packet switching network); and

(iii) sending information relating to the communication from the communication forwarding means to the communication control means (abstract, Ofek discloses The invention relates, in particular, to timely forwarding and delivery of data packet between voice over IP (VoIP) gateways; column 27, lines 38-45, Ofek discloses virtual pipe communications system for communicating packetized data over a virtual pipe comprised of a plurality of switches connected by communications links in a path, wherein a first switch within the virtual pipe is connected to receive the output of a first voice over Internet Protocol (IP) gateway and wherein a final switch within the virtual pipe is connected to provide an output coupled to transmit to a second voice over IP gateway).

Claims 8-10 do not teach or define any new limitations above claim 1-3, 6-7 and 11, and therefore are rejected for similar reasons.

**6.**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek U.S. 6,259,695 in view of Mayes et al. U.S. 5,793,763.

Ofek teaches the invention substantially as claimed including packet telephony scheduling with common reference.

As to claim 4, Ofek teaches a network according to claim 1.

Ofek fails to teach each communication forwarding means includes translation means for translating an external reference of one or both of the hosts into an internal reference.

However, Mayes teaches security system for network address translation systems. Mayes teaches a translation means (figure 2, item 32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ofek in view of Mayes to provide each communication forwarding means includes translation means for translating an external reference of one or both of the hosts into an internal reference. One would be motivated to do so to allow local hosts in an enterprise network to share global IP addresses (see abstract).

As to claim 5, Ofek teaches a network according to claim 4.

Ofek fails to teach the translation means is operable to translate a fixed IP address of the terminating Real Time Data over IP host into a dynamic IP address, for providing to the originating Real Time Data over IP host for the purpose of directing communication between the two hosts.

However, Mayes teaches the translation means is operable to translate a fixed IP address of the terminating Real Time Data over IP host into a dynamic IP address, for providing to the originating Real Time Data over IP host for the purpose of directing communication between the two hosts (abstract, Mayes discloses system and method are provided for translating local IP addresses to globally unique IP addresses; column

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13, lines 231-25, Mayes discloses inbound packets that are not destined for static translation slots may be destined for dynamic translation slots; figure 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ofek in view of Mayes to provide the translation means is operable to translate a fixed IP address of the terminating Real Time Data over IP host into a dynamic IP address, for providing to the originating Real Time Data over IP host for the purpose of directing communication between the two hosts. One would be motivated to do so to allow packets arriving from the internet screened by an adaptive security algorithm (see abstract).

## **8. Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-4010.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall  
Patent Examiner  
Art Unit: 2157

A handwritten signature in black ink, appearing to be the initials 'ES' or a stylized 'S'.A handwritten signature in black ink, appearing to be 'Saleh Najjar'.

SALEH NAJJAR  
PRIMARY EXAMINER